Asymptomatic gonorrhoea in a male patient

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Summary

A case of asymptomatic gonorrhoea in a male patient is described. Failure to isolate Neisseria gonorrhoea from his wife possibly demonstrates inhibitory effect of Candida albicans in vivo on the former organism.

KEY WORDS: infertility, seminal vesicles, Candida albicans.

Introduction

It is well established that the major reservoir of gonococcal infection in the community is asymptomatic females. The belief that gonorrhoea is always symptomatic in men may not necessarily be true as the following case proves.

Case report

As part of routine investigation for infertility a sample of seminal fluid was submitted by a 29-year-old male for analysis. On examination it showed the following: volume 1–6 ml, sperm count 59×10⁶/ml, motility 79% with 10% abnormal forms and the viscosity normal. It also had +++ pus cells. In view of the high number of pus cells and according to our routine practice the semen was inoculated onto 2 plates of horse blood agar, MacConkey, chocolate agar, GC selective medium, 2 plates of Islam’s medium, nutrient agar and Sabouraud’s dextrose agar. One plate each of horse blood agar and Islam’s medium were incubated anaerobically and the rest incubated in 10% CO₂ for 18 hr. As there was very faint growth the next morning they were all re-incubated for a further 24 hr. Gram films made from GC selective medium and chocolate agar showed Gram negative diplococci which were oxidase positive. The organisms failed to grow on the nutrient agar medium.

Difco serum sugars put in duplicate showed fermentation of glucose only, after 48 hr, which on prolonged incubation failed to ferment any other sugars. Minitek system (BBL) for Neisseria was put up in duplicate which also fermented only glucose.

The patient was completely asymptomatic with no urethral discharge, dysuria or frequency of micturition. The couple denied any extramarital relationship. As they were married for less than a year, the patient asked whether it is possible to carry gonococci asymptptomatically for so many months because of his promiscuity before marriage. He was requested to submit a further sample of seminal fluid for analysis and at the same time cervical, urethral, rectal and high vaginal swabs were collected from his wife. Although the semen had pus cells + + + and grew Neisseria gonorrhoea again with identical findings as before, the swabs from his wife yielded profuse growth of Candida albicans only from all but rectal swabs.

Discussion

Although asymptomatic gonorrhoea in males and its transmission had been recognized in the past it is still extremely rare, probably because of lack of awareness. But amongst 28 asymptptomatically infected men followed without treatment, 18 (64%) had been reported to remain asymptomatic carriers of N. gonorrhoea, and one remained symptom free for as long as 165 days. Also, in the past such cases were well known to develop after inadequate sulphonamide treatment but not after penicillin (Bittiner and Horne, 1955; Hunter Handsfield et al., 1974).

As gonococci were isolated twice from the seminal fluid, the patient possibly had latent gonococcal infection of the seminal vesicles. As not all patients are followed up by bacterial cultures after “adequate” antibiotic therapy, one wonders how many of them may potentially become asymptomatic carriers.

We failed to isolate gonococci from the patient’s wife, possibly due to heavy growth of C. albicans. It has been shown that N. gonorrhoea is inhibited in vitro by a factor produced by C. albicans. (Hipp et al., 1974). A clinical study showed that although N.
gonorrhoea was less frequently isolated from cervical specimens in the presence of *C. albicans*, it was possibly because many women with a candidal vaginitis attended the clinic who were probably not exposed to gonococcal infections. (Wallin and Gnarpe. 1975). Nevertheless, they concluded by pointing out that the clinicians should be aware of the possibility of false negative gonococcal cultures from women with genital candidiasis until the importance of the inhibitory effect of *C. albicans* has been studied further both *in vitro* and clinically. This may be the explanation of our failure to demonstrate the sexual transmission of gonorrhoea from the asymptomatic patient to his wife.

**References**


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